

This view of a Chase County fence shows a relict hedgerow and clear record of succession. Ironically, after barbed wire succeeded hedge as the leading type of fence in the late nineteenth century, the latter came to be recognized as the premier post for the attachment of barbed wire.

Wood or timber was a precious commodity in the prairie/plains region for the nineteenth-century settler and homesteader in Kansas. It was necessary for shelter, fuel, and—before barbed wire—fence building. Fences were needed to confine livestock and to protect crops and gardens. This article focuses on wood as a resource necessary for enclosure purposes, specifically hedge. For brevity, the term "hedge" will be utilized in place of Osage orange.

This common name, Osage orange, is one of many for this species, the Latin name for which is Maclura pomifera. Those who have had the good fortune, or misfortune, of harvesting it for firewood or fence posts probably have also used a number of expletives not proper to print because of its characteristic abundance of thorns. "Osage" refers to the Indian tribe that lived in the region where hedge was indigenous. "Orange" describes the shape and texture of the leaf, as well as the fruit, which resembles the edible orange. "Hedge" refers to the form the species can take in the landscape if manipulated by pruning, weaving, and trimming.

nce planted to serve as farm fences, hedgerows of Osage orange—or hedge apple—attract little attention today. However, they stand as a living example of functional landscape, and their significance in the development of Kansas cannot be denied.

It has only been in recent years that preservationists have studied the built environment in its totality; structures have received the bulk of scholarly attention while landscapes were virtually ignored. Unlike architectural elements, which may remain consistent over the decades, a landscape of planted trees is a modified ecosystem where controlled and uncontrolled succession constantly takes place; it is not static.

Today most Kansans think of hedges as urban aesthetic features; however, in early-day rural Kansas, they had very specific, functional purposes. When nurtured and properly maintained, Osage orange fences could easily pass the nineteenth-century test of a good fence: it had to be "horse-high, hog-tight, and bull-strong." Horses could not jump the

hedge at the normal height of four to five feet, hogs with their cantankerous behavior could not penetrate the woven stems, and even a prize bull had great difficulty making passage through a mass of thorns.

The Osage orange species of tree became dominant in nineteenth-century rural Kansas, but was largely rejected by the following generation. Introduced in the mid-nineteenth century, the Osage orange became one of the most planted tree species by the turn of the twentieth century. While it is much diminished today, its remnants remain as part of our rural landscape heritage.

Before the advent of barbed wire in the late 1870s, hedge fences reigned supreme in Kansas. Of all the pioneer fences, which included post and rail, worm (or Virginia rail), stone, sod, and even tree roots, hedge was the most popular. Even after barbed wire became the leading fence type, and well into the twentieth century, hedge was planted in great numbers strictly for enclosure purposes. In 1939, the U.S. Department of

Agriculture, utilizing Kansas State Board of Agriculture reports, determined that approximately 39,400 miles of hedge fence graced the Kansas landscape. Hedge best defined and dominated the spatial relationships of rural Kansas.

A Valuable Commodity, Hedge Use Spreads

Hedge is not an indigenous species to Kansas but is to the Red River region of Texas, Oklahoma, Louisiana, and Arkansas. The Lewis and Clark Expedition found hedge growing in the St. Louis area and learned of its great value to Native Americans for the construction of bows and other tools. Of unsurpassed resiliency compared to other hardwoods,

it was a valuable trade item among the various Indian tribes of the plains region. It is documented that a bow made from hedge was worth a horse and a blanket. By the 1840s, it had been introduced into the state of Illinois from the Red River region for use as fencing. From Illinois, it spread to other Midwestern states and was advertised for sale in a Lawrence newspaper as early as 1856. Hedge fences were first planted in Kansas during the Territorial Period, and use accelerated rapidly after the Civil War.

After the first and second waves of the original Kansas settlers, wood for building purposes became a

scarce resource. This problem was not isolated to Kansas but affected the entire Midwest. Research on fences by the federal government highlighted the necessity for substitute material for wood in the plains region and determined that the cost of building perimeter and interior fences on any given farm in the Midwest was of greater value than the combined costs of the land, livestock, and other improvements. The study concluded that settlement and westward expansion was being thwarted by the lack of adequate fencing materials. Hedge fencing helped solve this problem.

To provide an incentive for settlers to plant hedge for fencing—which takes three to five years to mature under the best conditions—the Kansas Legislature

passed a law in 1867 to pay financially strapped farmers \$2 for every 40 rods (or \$128 for every mile) of hedge that they planted. Even though this law was abolished in the late 1870s, many farmers took advantage of the opportunity and planted hedge with abandon. One regional newspaper called the hedge-planting craze "hedge mania," and the leading Kansas farm newspaper, the *Kansas Farmer*, advocated the creation of an association of "hedgers" for regulating the tree's use along public roadways.

The fruit of the Osage orange, or hedge apples, were in great demand. One mature apple contains approximately 800 seeds, and 30 to 40 apples make a bushel. The demand for hedge for fence planting in the Midwest became so intense that

Not all Osage orange was planted in the nineteenth century or in eastern Kansas. This one-mile length of hedge trees was planted in 1942 on the Earl Moss farm, located adjacent to US-24 close to the Sheridan/Thomas county line. Additional tree species planted in this row of trees includes mulberry. The author took this photo in winter 1999, acting on information about its location given to him by Don Rowlison of Studley.

hedge apples became a commodity purchased and sold on the Chicago Board of Trade. The frugal farmer could buy fruit and plant hedge trees from seed, and nurseries in eastern Kansas supplied many farmers with seedlings for transplanting. During the 1860s and 1870s, hedge seedlings were so popular that they made up the greatest volume in all Kansas nurseries. In April 1864, the Scott Farm in Jefferson County advertised 100,000 Osage orange plants for sale. Nurseries in Leavenworth and Douglas counties advertised 800,000 plants and 300 acres of plants, respectively. Other nurseries with huge supplies of hedge plants were located in Doniphan, Franklin, and Cherokee counties.

By 1882, hedge fencing had become

the most popular fence in Kansas, surpassing all other wood fencing in its various styles and designs. In that year, the state collectively counted approximately 48,000 miles of hedge in place and serving as fences. The leading county in hedge fence building was Johnson with other counties in southeast (Cherokee and Labette) and south-central (Sedgwick and Butler) also ranking high. Although barbed wire overtook hedge as a fencing material by 1886, hedge use peaked in 1895 with more than 72,000 miles reported.

Barbed Wire Brings End of Hedge's Reign

Although barbed wire became cheaper to purchase and install and was

much less labor intensive than maintaining a hedge fence, it was not readily accepted by some farmers. Livestock and horses not acclimated to the sharp barbs of barbed wire would tear their hides to such an extent that eastern leather processing markets would not accept the hides. Some farmers believed that lightning could electrocute cattle standing too close to barbed wire during thunderstorms. In spite of some negative editorials in farm and other prominent newspapers, barbed wire ultimately became the accepted type of fence, and it came to dominate the rural landscape for

enclosure purposes, surpassing living hedge fence.

Ironically, after its demise as fencing, hedge became the first choice for fence posts for barbed wire fences because hedge was determined to be the most disease-resistant wood in North America. A story testifying to hedge's durability circulated for several years: Two farmers were discussing the types of tree wood most suitable for fence posts. After some

Larry Rutter of Meriden, Kansas, retired after 20 years with the KSHS Historic Sites Division in 2001 and continues to conduct research and write about historic landscapes. He also provided the accompanying photos.

(Right) A bonafide twentieth-century hedgerow! This image from the Barnhardt farm in High Prairie Township in Leavenworth County was taken in August 2002. An early landowner named Dr. Boling originally planted Osage orange seedlings in the late 1860s. As late as the early 1920s, several miles of hedgerows surrounded this farm. Most were taken out in the 1930s with the advent of the automobile and the need for wider roads. This particular hedgerow leads to the old Boling farmstead and represents four generations of care and maintenance.



(Left) This row of hedge trees, also on the Barnhardt property, was planted during the same time period referenced in the preceding photo caption. It demonstrates a condition quite common today with this species in many areas of the state, a condition of maturation. In no way does it represent a manicured and cared for hedgerow that would have been found in nineteenth-century Kansas.

debate on the merits of different species, the older farmer made his point of favoring hedge by telling his young farmer friend that in his experience one hedge post would wear out two postholes! This author can testify to hedge post longevity as he remembers posts set in the 1940s that still stand intact today—a period of at least 60 years.

Today, we do not have many Osage orange hedges, but there are many former hedgerows that can be found as they were initially planted in the late nineteenth and early twentieth centuries. The death knell for many hedge fences sounded in the 1920s and 1930s with the advent of modern road and highway systems. Without question, farmers removed many hedges because they had become obsolete and modern farming practices of cropping from right-of-way to right-of-way allowed more ground to be farmed. However, a check of the old Kansas Highway Commission and local records tells us that many hedgerows were removed along roadways and township roads to make them wider, more

accessible, and safer for the motoring public. As barbed wire replaced hedge as a functional object, so the internal combustion engine further eliminated hedge for aesthetic reasons.

For earlier generations, hedgerows defined the rural landscape. Today only remnants of hedge fences remain as a part of our built environment. While some conservationists cite the use of this species as superb pioneering stewardship, some contemporary cattlemen have classified it as a "weed" that invades range and pastureland and should be completely eradicated. Those who study Osage orange, however, cannot refute its positive significance when managing property. Ongoing horticultural research on this much-maligned species as a cultivated variety for urban communities and corridor green space may well resurrect its once lofty popularity not seen since the late nineteenth century. In the meantime, students of historic landscapes recognize this species as a once "living" fence, or as evidence of our hedgerow heritage.

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